



Munich Personal RePEc Archive

# **Tribalism and Government Effectiveness**

Asongu, Simplice and Kodila-Tedika, Oasis

March 2016

Online at <https://mpra.ub.uni-muenchen.de/78142/>

MPRA Paper No. 78142, posted 06 Apr 2017 07:01 UTC

# A G D I Working Paper

WP/16/052

## **Tribalism and Government Effectiveness**

Published: Economics Bulletin, 37(1), pp. 156-167.

**Simplice A. Asongu**

African Governance and Development Institute,  
P.O. Box 8413, Yaoundé

E-mail: [asongusimplice@yahoo.com](mailto:asongusimplice@yahoo.com)

**Oasis Kodila-Tedika**

Department of Economics, University of Kinshasa,  
Democratic Republic of Congo.

E-mail: [oasiskodila@yahoo.fr](mailto:oasiskodila@yahoo.fr)

Research Department

## **Tribalism and Government Effectiveness**

**Simplice A. Asongu & Oasis Kodila-Tedika**

March 2016

### **Abstract**

This study assesses the relationship between tribalism (the tribalism index) and government effectiveness (per the World Bank) in 60 countries using cross-sectional data. This study finds that countries with high tribal populations generally enjoy bad governance in terms of government ineffectiveness. Government ineffectiveness and tribalism are found to mutually reinforce each other in a robust relationship.

*Keywords:* Institutions, Tribalism, Government effectiveness

*JEL Classification:* D02, D73, I20, O55

### **1. Introduction**

There is a substantial body of literature on the effect of ethnic diversity on the delivery of public commodities and the quality of government (e.g. Easterly and Levine, 1997; La Porta *et al.* 1999; Treisman, 2000; Alesina *et al.* 2003; Miguel and Gugerty, 2005; Kimenyi, 2006; Habyarimana *et al.* 2007). The innovation of the present line of inquiry is to extend the underlying literature by assessing the relationship between tribalism and government effectiveness. Accordingly, tribalism represents a more holistic measurement compared to ethnic diversity because it is a proxy that more closely reflects actions by individuals than ‘ethnic diversity’ which reflects a situational element (Kodila-Tedika and Asongu, 2015).

We postulate that countries with higher levels of tribalism should deliver less government effectiveness. In other words, the formulation and implementation of policies that deliver public commodities should be less apparent in countries with high levels of tribalism. Hence, the theoretical underpinnings associating ethnic diversity to low institutional quality are the same employed by this study. Meanwhile, as sustained earlier, tribalism represents a broader concept, relative to ethnic diversity.

In fact, tribalism is a doctrine which consists of unreasonably favouring individuals within a tribe or group of tribes. It is considered as an ethnic instrumentation by Mankou (2007). According to Jacobson and Deckard (2012), it entails scourges of corruption, rent seeking, inequality, indigenous population and group grievance. This note contributes to the existing literature by assessing the relationship between tribalism and government effectiveness.

The rest of the note is structured as follows. Section 2 discusses the data and methodology. The empirical analysis is covered in Section 3. Section 4 concludes.

## **2. Data**

The study assesses cross sections from 60 countries<sup>1</sup>. The choice of countries is based on data availability constraints in the control variables. Data on government effectiveness/efficiency is obtained from the dataset compiled by Kaufmann, Kraay and Mastruzzi (2010) at the World Bank. The indicator is based on 30 underlying data sources reporting the perceptions of governance of a large number of survey respondents and expert assessments worldwide. Government effectiveness/efficiency is distributed between -2.5 (worst performance) and 2.5 (best performance).

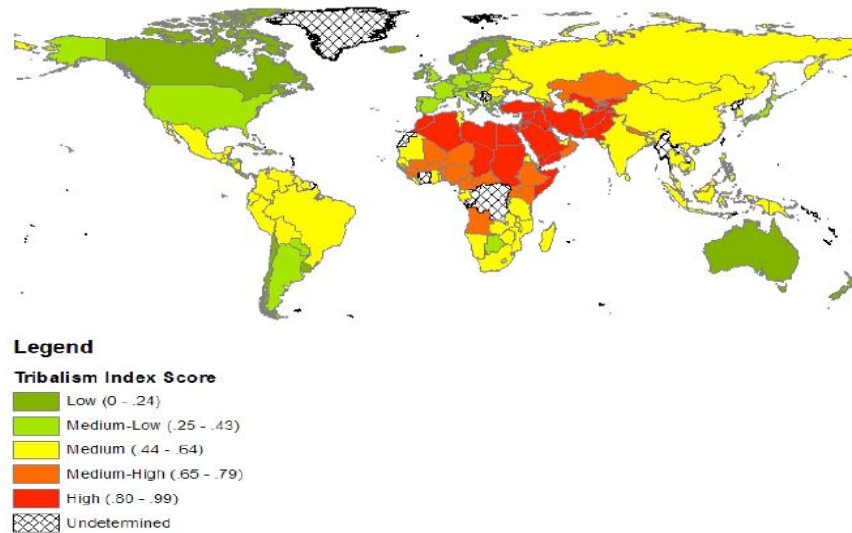
To measure tribalism, we use the tribalism index data by Jacobson and Deckard (2012). It is a weighted aggregate of the components detailed, which

---

<sup>1</sup> Angola; Argentina; Australia; Belgium; Burkina Faso; Bangladesh; Brazil; Canada; Chile; China; Cote d'Ivoire; Cameroon; Colombia; Comoros; Czech Republic; Algeria; Ecuador; Egypt; Spain; France; UK; Ghana; Guatemala; Hungary; Indonesia; India; Italy; Kenya; Republic of Korea; Sri Lanka; Morocco; Madagascar; Mexico; Mali; Mozambique; Malawi; Niger; Nigeria; Netherlands; Nepal; Pakistan; Peru; Philippines; Poland; Portugal; Romania; Russia; Senegal; Syria; Thailand; Tunisia; Turkey; Tanzania; Uganda; USA; Venezuela; Vietnam; South Africa; Zambia and Zimbabwe.

ranges from a score of 0 (the hypothetical lowest score) to a score of 1 (the highest). Figure 1 shows that there exist substantial variations in tribalism across the world. The highest consumption levels can be found primarily in developing countries.

FIGURE 1: SPATIAL REPRESENTATION OF THE TRIBALISM INDEX



As for control variables, we include openness to trade (or KOF index of economic globalization) from the literature (Dreher 2006; Dreher et al. 2008) for the year 2005 (from Penn World Tables 6.3); the log of GDP per capita for the year 2005 (from Penn World Tables 6.3); democracy for the year 2005 (from Cheibub et al. 2010); average years of schooling (% of population aged 25 and over) from Barro and Lee (2010); legal origins and geographical location to account for recent debates in the literature on the quality of institutions (e.g. Kodila-Tedika, 2014; Kodila-Tedika et al. 2013; Asongu, 2012). Following the trend in the literature, legal origin is captured by distinguishing between the English, French, German, Scandinavian and socialist legal heritages (La Porta et al. 1999). We estimate the model with Ordinary Least Squares (OLS) and robust standard errors.

**Table 1: Summary Statistics**

Variables	Obs	Mean	Std. Dev.	Min	Max
Government effectiveness	139	0.113	0.993	-1.751	2.217
Tribalism	63	0.533	0.187	0.2	0.995
Africa	180	0.306	0.462	0	1
Americas	180	0.200	0.393	0	1
Asia	180	0.244	0.431	0	1
Europa	180	0.228	0.421	0	1
Legal Origin (UK)	141	0.284	0.452	0	1
Legal Origin (French)	141	0.447	0.499	0	1
Legal Origin (German)	141	0.043	0.203	0	1
Democracy	140	0.657	0.476	0	1
GDP per capita (log)	140	8.871	1.188	5.903	11.173
Economic globalization	134	63.286	16.172	26.963	96.342

Obs : Observations. Std. Dev : Standard Deviation. Min: Minimum. Max: Maximum.

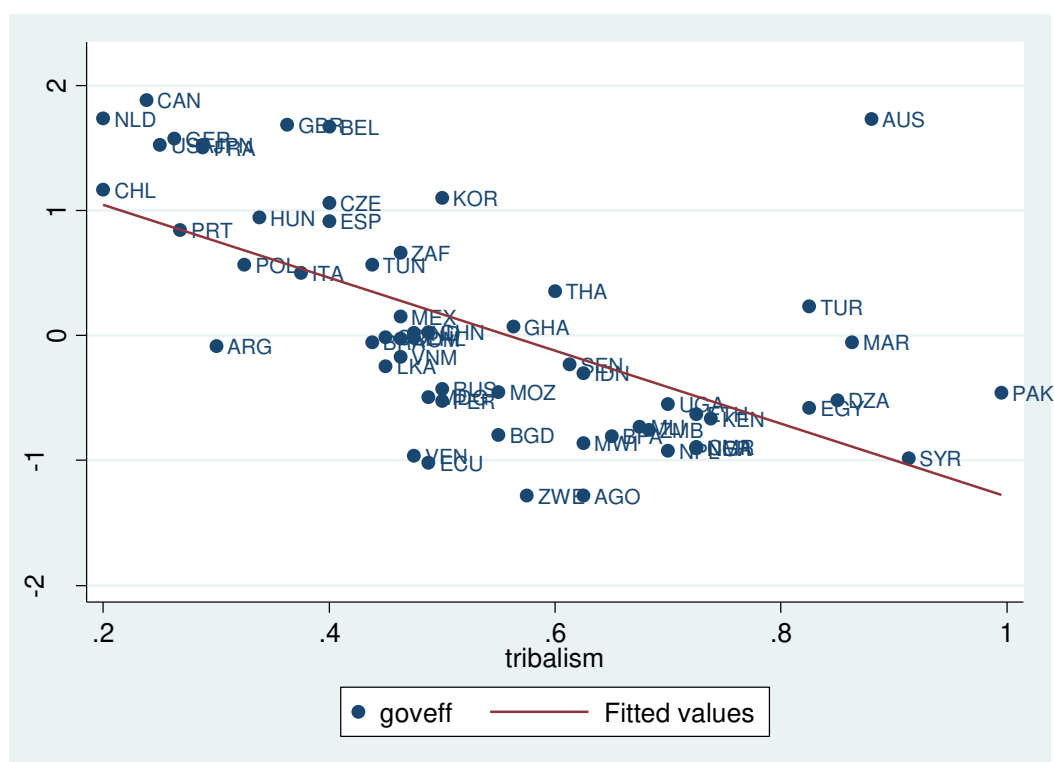
Table 1 below presents the summary statistics. From the means (that are comparable) and standard deviations (from which significant variations are apparent), we can be confident the reasonable estimated relationships would emerge.

### 3. Results

#### 3.1 Basic results

The graph below (or Figure 2) presents a visual relationship between tribalism and government effectiveness. We notice a trend with a decreasing tendency, which is an indication of a negative relationship between the two variables. It is however important to complement this exploratory visual relationship with some empirical relationship.

**Figure 2: The relationship between tribalism and government effectiveness**



### 3.2. Results with tribalism as an exogenous variable

Table 2 presents the basic results. Model 1 estimates the relationship between tribalism and government effectiveness/efficiency without a conditioning information set (or control variables) while the remaining models include some controls, unless where these were dropped due to multicollinearity. With the exception of the regional indicator, the control variables, included in these regressions display the expected signs and are statistically significant in several cases. Per capita income is statistically significant at the 1% level in Column 3 and has the expected negative sign. Higher income is thus associated with high government effectiveness/efficiency (Asongu, 2014). The results show, however, that democracy does not have a significant effect on government effectiveness/efficiency. The KOF index of economic globalization is statistically significant at the 10% level and has the expected positive sign. Globalization thus improves government effectiveness (Asongu and Nwachukwu, 2016a).

The variable of interest is negative and statistically significant in all cases. Accordingly, the coefficients of tribalism are statistically significant at the 1% level in all regressions. This coefficient is strongly significant. The first column

does not include other determinants. The tribalism variable accounts for 40.8% of variations in government effectiveness/efficiency.

**Table 2: Basic results**

	1	2	3
Tribalism	-2.854*** (0.529)	-2.88*** (0.683)	-1.321*** (0.449)
Africa		-1.023*** (0.267)	-0.665* (0.335)
Americas		-.834*** (0.263)	-1.476*** (0.359)
Asia		-2.606*** (0.208)	-0.846*** (0.304)
Europa		-2.476*** (0.344)	-1.125*** (0.313)
GDP per capita (log)			0.538*** (0.105)
Democracy			0.225 (0.155)
Economic globalization			0.010 (0.007)
Legal Origin (UK)			(0.174) 0.083
Legal Origin (French)			(0.146) 0.345
Legal Origin (German)			(0.223) 0.251
Constant	1.568*** (0.283)	4.268*** (0.282)	-3.865*** (1.149)
Number of observations	63	63	63
Adjusted R <sup>2</sup>	0.408	0.58	0.80

Notes: \*\*\*, \*\*, \*; Significance levels of 1%, 5% and 10% respectively.  
Standard errors in brackets. UK: United Kingdom. Log: logarithm. GDP:  
Gross Domestic Product.

We verify if the established negative relationship withstands further empirical scrutiny in a plethora of robustness checks. In order to further improve the



estimations, we follow the empirical approach on M-estimators by Huber (1973) using Iteratively Reweighted Least Squares (IRWLS). As Midi and Talib (2008) have noted, compared to the OLS approach, the advantage of these robust estimators is that they simultaneously fix any issue arising from the existence of outliers and/or heteroskedasticity (non-constant error variances). We find in Table 2 that the signs and significance of the variables across specifications are consistent with those of Table 3.

In Table 3, more control variables are used. The additional control variables include: average years of schooling (Barro and Lee, 2010), social trust (Bjørnskov, 2011), size of the shadow economy (Dreher and Schneider 2010) and an Organisation for Economic Co-operation and Development (OECD) dummy variable. The signs of the independent variables of interest are consistent with those in Tables 2.

**Table 2: Regression results (extended conditioning information set)**

	eq1	eq4	eq2	eq3
Tribalism	-1.373*** (0.490)	-0.210 (0.362)	-0.925* (0.534)	-0.925* (0.399)
Africa	(dropped)	-0.407 (0,364)	-0.151 (0,538)	-0.151* (0.055)
Americas	-0.787*** (0.264)	-0,424 (0.351)	-0.798 (0.518)	-0.798** (0.223)
Asia	-0.213 (0.179)	-0.343 (0.328)	-0.345 (0.484)	-0.345** (0.116)
Europa	-0.509 (0.305)	-0.529 (0.347)	-0.737 (0.513)	-0.737* (0.281)
GDP per capita (log)	0.510*** (0.121)	0.243* (0.130)	0.266 (0.192)	0.266** (0.069)
Democracy	0.166 (0.158)	0.098 (0.123)	0.187 (0.182)	0.187 (0.179)
Economic globalization	0.013* (0.007)	0.030*** (0.005)	0.018** (0.007)	0.018** (0.006)
Legal Origin (UK)	0.270 (0.231)	0.504*** (0.170)	0.374 (0.251)	0.374* (0.169)
Legal Origin (French)	0.113 (0.214)	0.130 (0.176)	0.109 (0.259)	0.109 (0.058)
Legal Origin (German)	0.406 (0,,369)	0.691** (0.269)	0.393 (0.397)	0.393** (0.113)
Social trust		0.001 (0.004)	0.004 (0.006)	0.004 (0.006)
OECD		0.009 (0.143)	0.286 (0.211)	0.286* (0.133)
Schadow		-0.023*** (0.005)	-0.015** (0.007)	-0.015* (0.007)
Schooling		-0.007 (0.032)	0.033 (0.047)	0.033* (0.013)
Constant	-4.372*** (0.918)	-2.971** (1.148)	-2.698 (1.693)	-2.698** (0.866)
Cluster continent	No	No	Yes	Yes
IRWLS	Yes	No	No	Yes
Number of observations	58	44	44	44
R <sup>2</sup>	0.819	0.956	0.905	0.905
Adjusted R <sup>2</sup>	0.8543			

Notes: \*\*\*, \*\*, \*; Significance levels of 1%, 5% and 10% respectively. GDP: Gross Domestic Product. IRWLS: Iteratively Reweighted Least Squares.

### **3.2. Result with tribalism as an endogenous variable**

Studies have consistently established the corollary of tribalism, notably: that ethnic fragmentation affects the quality of institutions (La Porta *et al.* 1999; Easterly and Levine, 2001; Alesina *et al.* 1999; Alesina *et al.* 2003). Among the rare studies that have considered ethnic fragmentation as a consequence of institutions is Leeson (2005). Prior, Easterly (2001) had established that best institutions can attenuate the negative impacts of ethnic fragmentation. Leeson (2005) builds on Easterly (2001) to show that issues of ethnic fragmentation (e.g. tribalism) are consolidated in the presence of poor institutions. The author demonstrates from the pre-colonial era of Africa that poor institutions were caused by tribal configurations or ethnic problems. Hence according to Leeson (2005), ethnic fragmentation is both exogenous and endogenous to the quality of institutions.

The notion that ethnic fragmentation could be endogenous has been explored by Michalopoulos (2012) and Ahlerup and Olsson (2012) in a clear and substantive manner. However, the idea of testing the particular hypothesis of Leeson (2005) has not been covered in the literature. Hence, we are attempting to test this hypothesis in order to isolate the effect of ethnic fragmentation within the framework of tribalism on government institutions. Wang and Steiner (2015) and Churchill *et al.* (2015) have employed differences in elevation, land quality, and latitude as instruments for ethnolinguistic diversity. Within the framework of this study, latitude is employed which has been demonstrated by Ahlerup and Olsson (2012) to be exogenous to ethnic fragmentation and/or tribalism. This is simply explained in the perspective that the literature employs this variable as a regressor for the quality of institutions. Hence, we are left with the instruments of Michalopoulos (2012), namely: elevation and variation in land quality. Michalopoulos (2012) and Wang and Steiner (2015) have documented the theoretical discourse on the validity of these instruments.

**Table 3: Estimation with Instrumental variables**

	eq1	eq2	eq3	eq4
Tribalism	-4.148*** (1.345)	-5.223** (2.651)	-3.415 (3.668)	-2.851 (3.075)
Africa		-3.427*** (0.874)	-1.601 (1.837)	-1.409 (1.500)
Americas		-4.135*** (1.481)	-2.741 (2.141)	-2.378 (1.869)
Asia		-3.258*** (0.997)	-1.762 (1.745)	-1.513 (1.393)
Europa		-3.520** (1.544)	-2.386 (2.092)	-1.938 (1.682)
GDP per capita (log)			0.468* (0.261)	0.457** (0.179)
Democracy			0.088 (0.390)	0.069 (0.307)
Economic globalization			0.005 (0.008)	0.007 (0.009)
Legal Origin (UK)				0.338 (0.206)
Legal Origin (French)				0.230 (0.320)
Legal Origin (German)				0.303 (0.259)
Constant	2.286*** (0.723)	6.328*** (2.417)	-0.566 (6.428)	-1.421 (4.924)
Number of observations	59	59	59	59
Sargan statistic (p-value)	0.1731	0.7580	0.5795	0.5208
Adjusted R <sup>2</sup>	0.319	0.507	0.761	0.801

Notes: \*\*\*; \*\*, \*; Significance levels of 1%, 5% and 10% respectively.

In Table 3, we test the validity of the instruments employed in Michalopoulos (2012), Wang and Steiner (2015) and Churchill et al. (2015). The null hypothesis of the Sargan Overidentifying restrictions test which is not overwhelmingly rejected confirms the validity of the instruments. It is important to note that the two instrumental variables are drawn from Michalopoulos (2012). Moreover, the specifications of Table 4 are consistent with those in Table 3. Accordingly, the control variables are progressively added to from the left-hand-side to the right-hand-side. A consistent negative relationship between tribalism and the dependent variable is apparent. Hence evidence of causality flowing from tribalism to government effectiveness is apparent when instrumental variables are

employed. However, this conclusion should be treated with caution because the last-two estimations in Table 3, while robust, are not significant.

#### **4. Concluding implications and future research directions**

We argue in this article that the level of tribalism is likely to affect the government effectiveness/efficiency enjoyed by the population of a country. Our econometric analysis has established that countries with high-tribal populations generally enjoy bad governance in terms of government ineffectiveness. Government ineffectiveness and tribalism are found to mutually reinforce each other in a robust relationship.

Given that government effectiveness is assimilated to economic governance which is the formulation and implementation of policies that deliver public commodities (see Asongu and Nwachukwu, 2016bc), high levels of tribalism within a nation prevent the government from implementing measures that enhance inclusive and human development. Given that inclusiveness is a central theme in the post-2015 sustainable development agenda, future research can focus on assessing whether the established findings withstand scrutiny within the framework of inclusive human development.

## References

- Ahlerup, P and O. Olsson (2012) The roots of ethnic diversity. *Journal of Economic Growth* **17(2)**, 71-102.
- Alesina, A., Devleeschauwer, A., Easterly, W., Kurlat, S and R. Wacziarg (2003) "Fractionalization", *Journal of Economic Growth* **8(2)**, 155-194.
- Alesina, A., R. Baqir and W. Easterly (1999) "Public goods and ethnic divisions" *Quarterly Journal of Economics* **114**, 1234-1284.
- Asongu, S. A., and J. C. Nwachukwu (2016a) "Revolution empirics: predicting the Arab Spring" *Empirical Economics* **51(2)**, 439-482.
- Asongu, S. A., and J. C. Nwachukwu (2016b) "The Mobile Phone in the Diffusion of Knowledge for Institutional Quality in Sub-Saharan Africa" *World Development* **86(October)**, 133-147.
- Asongu, S. A., and J. C. Nwachukwu (2016c) "The role of governance in mobile phones for inclusive human development in Sub-Saharan Africa" *Technovation* **55-56(October)**, pp. 1-13.
- Asongu, S. A. (2012) "Law and finance in Africa" *Brussels Economic Review* **55(4)**, 385-408.
- Asongu, S. A. (2014) "Globalisation (fighting), corruption and development: How are these phenomena linearly and nonlinearly related in wealth effects?", *Journal of Economic Studies* **41(3)**, 346-369.
- Barro, R. J and J-W, Lee (2010) "A new data set of educational attainment in the world". 1950-2010. *NBER Working Paper* 1590, Cambridge.
- Cheibub, J., Gandhi, J and J. R. Vreeland (2010) "Democracy and dictatorship revisited" *Public Choice* **143**, 67-101.
- Churchill, S. A, Okai, D and A. Posso (2015) "Internet Use and Ethnic Heterogeneity in a Cross Section of Countries". *Economic Papers: A journal of applied economics and policy*, n/a-n/a. doi: 10.1111/1759-3441.12125
- Dreher, A. (2006) "Does globalization affect growth? Evidence from a new index of globalization" *Applied Economics* **38**, 1091-1110.
- Dreher, A., Gaston, N and P. Martens (2008) *Measuring globalization – Gauging its consequences*. Springer, Berlin.
- Easterly, W. and R. Levine (1997) "Africa's growth tragedy: policies and ethnic divisions" *Quarterly Journal of Economics* **112(4)**, 1203-1250.
- Easterly, W. (2001) "Can institutions resolve ethnic conflict?", *Economic Development and Cultural Change* **49**, 687-706.

Easterly, W. and R. Levine (1997), 'Africa's growth tragedy: policies and ethnic divisions' *Quarterly Journal of Economics* **112**, 1203-1250.

Habyarimana, J., Humphreys, M., Posner, D. N and J. M. Weinstein (2007) "Why Does Ethnic Diversity Undermine Public Goods Provision?" *American Political Science Review* **101**(4), 709-725.

Huber, P. J (1973) "Robust Regression: Asymptotics, Conjectures and Monte Carlo" *The Annals of Statistics* **1**, 799-821.

Jacobson, D and N. Deckard (2012) "The Tribalism Index: Unlocking the Relationship between Tribal Patriarchy and Islamist Militants." *New Global Studies* 6(1).

DOI: <https://doi.org/10.1515/1940-0004.1149>

Kaufmann, D., Kraay, A., and M. Mastruzzi (2010) "The world wide governance indicators: methodology and analytical issues". *Policy Research Working Paper Series* No. 5430. Washington.

Kimenyi, M. S. (2006) "Ethnicity, Governance and the Provision of Public Goods", *Journal of African Economies*, 15, AERC supplement **1**, 62-99.

Kodila-Tedika, O. (2014) "Governance and Intelligence: Empirical Analysis from African Data" *The Journal of African Development* **16**(1), 83-97.

Kodila-Tedika, O and S. A. Asongu (2015) "Tribalism and Financial Development" *African Governance and Development Institute Working Paper* No. 15/018, Yaoundé.

Kodila-Tedika, O., Kanyama-Kalonda, I and F. Azia-Dimbu (2013) "Alcohol and Corruption" *Journal of Advanced Research in Law and Economics* **2**(8), 149-157.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and R. Vishny (1999) "The quality of government" *Journal of Law, Economics, and Organization* **15**, 222-279.

Leeson, P. (2005) "Endogenizing fractionalization" *Journal of Institutional Economics* **1**(1), 75-98.

Michalopoulos, S. (2012) "The origins of ethnolinguistic diversity" *The American Economic Review* **102**(4), 1508.

Midi, H. and B. A. Talib (2008) "The Performance of Robust Estimator on Linear Regression Model Having both Continuous and Categorical Variables with Heteroscedastic Errors" *Malaysian Journal of Mathematical Sciences* **2**(1), 25-48.

Miguel, E. and M. K. Gugerty (2005) "Ethnic diversity, social sanctions, and public goods in Kenya" *Journal of Public Economics* **89**, 2325-2368.

Treisman, D. (2000) "The causes of corruption: a cross-national study" *Journal of Public Economics* **76**(3), pp. 399-457.

Wang, C and B. Steiner (2015) "Can Ethno-Linguistic Diversity Explain Cross-Country Differences in Social Capital?: A Global Perspective" *Economic Record* **91(294)**, 338-366.